## WHAT IS CLAIMED IS:

1. A method of prevention and/or treatment of atherosclerosis, cardiovascular disease, cerebrovascular disease, peripheral vascular disease, stenosis, restenosis and/or in-stent-stenosis in a subject in need thereof, the method comprising administering a therapeutically effective amount of a compound, said compound selected from the group having a formula:

$$H_2C$$
 $CH$ 
 $O$ 
 $A_1$ 
 $R_1$ 
 $H_2C$ 
 $CH$ 
 $O$ 
 $A_2$ 
 $R_2$ 
 $H_2C$ 
 $O$ 
 $R_3$ 

or pharmaceutically acceptable salts thereof, wherein:

- (i) A<sub>1</sub> and A<sub>2</sub> are each independently selected from the group consisting of CH<sub>2</sub> and C=O, at least one of A<sub>1</sub> and A<sub>2</sub> being CH<sub>2</sub>;
- (ii)  $R_1$  and  $R_2$  are each independently selected from the group consisting of an alkyl chain having 1-27 carbon atoms and

wherein X is an alkyl chain having 1-24 carbon atoms, Y is selected from the group consisting of:

Z is selected from the group consisting of:

$$0 = C, \quad O = C, \quad O$$

whereas R4 is an alkyl,

at least one of  $R_1$  and  $R_2$  being said -x; and

- (iii) R<sub>3</sub> is selected from the group consisting of H, acyl, alkyl, phosphatidyl choline, phosphatidyl ethanolamine, phosphatidyl serine, phosphatidyl cardiolipin and phosphatidyl inisitol.
- 2. The method of claim 1, wherein each of  $A_1$  and  $A_2$  is  $CH_2$ .
- 3. The method of claim 1, wherein  $R_1$  is an alkyl chain having 1-27 carbon atoms and  $R_2$  is

wherein X is an alkyl chain having 1-24 carbon atoms, Y is selected from the group consisting of:

Z is selected from the group consisting of:

$$O = C$$
,  $O = C$ , and  $O = C$ ,

whereas R<sub>4</sub> is an alkyl.

4. The method of claim 3, wherein each of  $A_1$  and  $A_2$  is  $CH_2$ .

- 5. The method of claim 1, wherein said compound is administered via mucosal administration.
- 6. The method of claim 1, wherein administration of said compound is nasal, oral or intra-peritoneal administration.
- 7. The method of claim 1, wherein administration of said compound reduces immune reactivity to oxidized LDL in said subject.
- 8. The method of claim 1, wherein said compound is administered in addition to a therapeutically effective amount of at least one additional compound selected from the group consisting of HMGCoA reductase inhibitors (statins), mucosal adjuvants, corticosteroids, anti-inflammatory compounds, analgesics, growth factors, toxins, and additional tolerizing antigens.
- 9. A method of prevention and/or treatment of an inflammatory disorder, an immune mediated disease, an autoimmune disease and a proliferative disorder selected from the group consisting of aging, rheumatoid arthritis, juvenile rheumatoid arthritis, inflammatory bowl disease and cancer in a subject in need thereof, the method comprising administering a therapeutically effective amount of a compound, said compound selected from the group having a formula:

$$H_2C$$
 $CH$ 
 $O$ 
 $A_1$ 
 $R_1$ 
 $H_2C$ 
 $CH$ 
 $O$ 
 $A_2$ 
 $R$ 
 $H_2C$ 
 $O$ 
 $R_3$ 

or pharmaceutically acceptable salts thereof, wherein:

- (i) A<sub>1</sub> and A<sub>2</sub> are each independently selected from the group consisting of CH<sub>2</sub> and C=O, at least one of A<sub>1</sub> and A<sub>2</sub> being CH<sub>2</sub>;
- (ii) R<sub>1</sub> and R<sub>2</sub> are each independently selected from the group consisting of an alkyl chain having 1-27 carbon atoms and

$$-x$$

wherein X is an alkyl chain having 1-24 carbon atoms, Y is selected from the group consisting of:

Z is selected from the group consisting of:

$$O = C$$
,  $O = C$ , and  $O = C$ ,

whereas R<sub>4</sub> is an alkyl,

- (iii) R<sub>3</sub> is selected from the group consisting of H, acyl, alkyl, phosphatidyl choline, phosphatidyl ethanolamine, phosphatidyl serine, phosphatidyl cardiolipin and phosphatidyl inisitol.
- 10. The method of claim 9, wherein each of  $A_1$  and  $A_2$  is  $CH_2$ .
- 11. The method of claim 9, wherein  $R_1$  is an alkyl chain having 1-27 carbon atoms and  $R_2$  is

wherein X is an alkyl chain having 1-24 carbon atoms, Y is selected from the group consisting of:

o=c, o=c, o-OH, -H, alkyl, alkoxy halogen, acetoxy and aromatic functional groups; and

Z is selected from the group consisting of:

$$o = C$$
,  $o = C$ , and  $o = C$ ,

whereas R<sub>4</sub> is an alkyl.

- 12. The method of claim 11, wherein each of  $A_1$  and  $A_2$  is  $CH_2$ .
- 13. The method of claim 9, wherein said compound is administered via mucosal administration.
- 14. The method of claim 9, wherein administration of said compound is nasal, oral or intra- peritoneal administration.
- 15. The method of claim 9, wherein administration of said compound reduces immune reactivity to oxidized LDL in said subject.
- 16. The method of claim 9, wherein said compound is administered in addition to a therapeutically effective amount of at least one additional compound selected from the group consisting of HMGCoA reductase inhibitors (statins), mucosal adjuvants, corticosteroids, anti-inflammatory

compounds, analgesics, growth factors, toxins, and additional tolerizing antigens.

- 17. A method of synthesizing an oxidized phospholipid comprising:
- (a) providing a phospholipid backbone including two fatty acid side chains, wherein at least one of said fatty acid side chains is a mono-unsaturated fatty acid having 2-15 carbon atoms; and
- (b) oxidizing the unsaturated bond of said mono-unsaturated fatty acid to thereby generate the oxidized phospholipid.
- 18. The method of claim 17, wherein said phospholipid backbone further includes a moiety selected from the group consisting of H, phosphatidyl choline, phosphatidyl ethanolamine, phosphatidyl serine, phosphatidyl cardiolipin and phosphatidyl inisitol.
- 19. The method of claim 17 wherein the oxidized phospholipid is POVPC, and said mono-unsaturated fatty acid is 5-hexenoic acid.